

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Johnson J.H. Wang

Confirmation No.: To Be Assigned

Group Art Unit: To Be Assigned

Serial No.: To Be Assigned

Examiner: To Be Assigned

Filed: Even Date Herewith

Docket No.: 62306-1070

For: Broadband/Multi-Band Circular Array Antenna

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Sir:

This information disclosure statement is filed in accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, and specifically:

- ☒ under 37 CFR 1.97(b), or  
(within Three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:  
☐ Statement Under 37 C.F.R. 1.97(e), or  
☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97(b) time period, but before the final office action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with a:  
☐ Statement under 37 CFR 1.97(e), and  
☐ a \$180.00 petition fee set forth in 37 CFR 1.17(p).  
(Filed after final office action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Enclosed is a check in the amount of \$

Enclosed is Credit Card Payment Form (PTO-2038) in the amount of \$

Please charge \$0.00 to deposit account 20-0778. At any time during the pendency of this application, please charge any fees required to Deposit Account 20-0778 pursuant to 37 CFR 1.25. The Commissioner is hereby requested to credit any overpayment to Deposit Account No. 20-0778.

- ☒ Applicant(s) submit herewith *Form PTO 1449A - Information Disclosure Statement by Applicant* together with copies (where required) of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may or may not be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56. As required by 37 C.F.R. § 1.98(a), a legible copy of each document is provided.

- ☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56(c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on the form PTO 1449 and is enclosed herewith.


The following rights are reserved by the Applicant(s): the right to establish the patentability of the claimed invention over any of the listed documents should they be applied as reference, and/or the right to prove that some of these documents may not be prior art, and/or the right to prove that some of these documents may not be enabling for the teachings they purport to offer.

This statement should not be construed as a representation that an exhaustive search has been made, or that information more material to the examination of the present application does not exist. Any statements or identifications regarding the relevance of any portion(s) of cited references should not be construed as a representation that the most relevant portion(s) have been identified, and the absence of such statements or identifications should not be construed as representations that there are no relevant portion(s). The Examiner is specifically requested not to rely solely on the materials submitted herewith. The Examiner is requested to conduct an independent and thorough review of the documents, and to form independent opinions as to their significance.

It is requested that the information disclosed herein be made of record in this application and that the Examiner initial and return a copy of the enclosed PTO-1449 to indicate the documents have been considered.

Respectfully Submitted,

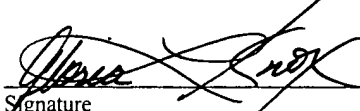
THOMAS, KAYDEN, HORSTEMEYER  
& RISLEY, L.L.P.

By:   
Robert A. Blaha, Reg. No. 43,502

100 Galleria Parkway, Suite 1750  
Atlanta, Georgia 30339-5948  
770-933-9500

**CERTIFIED MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as "First Class Mail," in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on 03/29/04

  
Signature

Form PTO-1449

Attorney Docket No.  
**62306-1070**Serial No.  
**To Be Assigned****INFORMATION DISCLOSURE CITATION***(Use several sheets if necessary)*Applicant  
**Johnson J.H. Wang**Filing Date  
**Even Date Herewith**Group  
**To Be Assigned****U.S. PATENT DOCUMENTS**

Examiner Initials	Item	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	A	1,860,123	05/24/32	Hidetsugu Yagi			
	B	3,560,978	02/02/71	Himmel, et al.	343	106	
	C	3,846,799	11/05/74	Gueguen	343	833	
	D	4,631,546	12/23/86	Dumas, et al.	343	833	
	E	4,700,197	10/13/87	Milne	343	837	
	F	5,767,807	06/16/98	Pritchett	342	374	
	G	6,049,310	04/11/00	Sadahiro	343	702	
	H	6,407,719	06/18/02	Ohira, et al.	343	893	
	I	6,515,635 B2	02/04/03	Chiang, et al.	343	834	

**FOREIGN PATENT DOCUMENTS**

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	J							

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)**

	K	Article entitled "The Use of a Ring Array as a Skip Range Antenna*" by Tillman, et al., original manuscript received June 17, 1955, revised manuscript received August 8, 1955, Tillman, Patton, Blakely, and Schultz: Skip Range Antenna, pp. 1655-1660.						
	L	Article entitled "Parasitic Excitation of Circular Antenna Arrays*" by Simpson, et al., dated May 1961, pp. 263-267.						
	M	Article entitled "IEEE Transactions on Antennas and Propagation" by Ruben Das; dated May 1966, pp. 398-400.						
	N	Article entitled "Electronically Scanned TACAN Antenna" by Edward J. Christopher, IEEE Transactions on Antennas and Propagation, Vol. AP-22, No. 1, January 1974, pp. 12-16.						
	O	Article entitled "Reactively Controlled Directive Arrays" by Roger F. Harrington, IEEE Transactions on Antennas and Propagation, Vol. AP-26, No. 3, May 1978, pp. 390-395.						
	P	Article entitled "Properties and Applications of the Large Circular Resonant Dipole Array" by King, et al., IEEE Transactions on Antennas and Propagation, Vol. 51, No. 1, January 2003, pp. 103-109.						
	Q	Article entitled "A Microwave Beacon and Guiding Signals for Airports and Their Approaches" by Ronold W.P. King, IEEE Transactions on Antennas and Propagation, Vol. 51, No. 1, January 2003, pp. 110-114.						

\* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

EXAMINER'S SIGNATURE:

DATE CONSIDERED: